

AMENDMENT UNDER 37 C.F.R. § 1.114(c)
U.S. APPLN. NO. 09/497,515
ATTORNEY DOCKET NO. Q57834

REMARKS

Claims 1-20 are all the claims pending in the application. Claims 11-20 are withdrawn from consideration as being drawn to a non-elected invention.

Applicant herein amends claims 1 and 3 to recite that the porous polymer does not substantially contain anything except its polymer material. Support for the amendment to claims 1 and 3 can be found at, for example, page 13, line 22 to page 14, line 22 of the instant written disclosure, as well as in examples 1-5. Entry and consideration of the amendments to claims 1 and 3 is respectfully requested.

1. Claims 1-7, 9 and 10 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Mussell *et al.* (U.S. Patent No. 5,620,807). Applicant respectfully traverses the rejection of claims 1-7, 9 and 10 at least for the reasons discussed below.

To support a conclusion that a claimed invention lacks novelty under 35 U.S.C. § 102, a single source must teach all of the elements of a claim. *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1379 (Fed. Cir. 1986). A claim is anticipated only if each and every element as set forth in the claim is found either expressly or inherently in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). A single source must disclose all of the claimed elements arranged as in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989). Rejections under 35 U.S.C. § 102 are proper only when the claimed subject matter is identically disclosed or described in the prior

art. Thus, the cited reference must clearly and unequivocally disclose every element and limitation of the claimed invention.

The Examiner asserts that Mussell *et al.* disclose, *inter alia*, a “composition used to prepare the small pore region of the intermediate layer preferably contains polymer, carbon particles, and a suitable carrier” and that the “composition used to prepare the small pore region is preferably a liquid-based composition which will solidify after application.” *See* col. 3, lines 59-61 and col. 4, lines 21-23 of Mussell *et al.*, respectively. The Examiner specifically relies on Mussell *et al.* disclosing a porous polymer having pores, insofar as a solidified polymeric compound is specifically disclosed to contain pores.

Mussell *et al.* do not teach or suggest, however, a porous polymer does not substantially contain anything except its polymer material, as recited in independent claims 1 and 3. In the October 17, 2003 Office Action, the Examiner is quite specific that “applicant’s claimed ‘porous polymer’ does not preclude a solidified polymeric composition.” *See* page 3 of the October 17, 2003 Final Office Action. Applicant has amended claims 1 and 3 to preclude a solidified polymeric composition.

Based on the foregoing reasons, Applicants believe that Mussell *et al.* fail to disclose all of the claimed elements as arranged in independent claims 1 and 3. Therefore, under *Hybritech* and *Richardson*, Mussell *et al.* clearly cannot anticipate the present invention as recited in independent claims 1 and 3. Thus, Applicant believes that claims 1 and 3 are allowable, and further believe that claims 2-7, 9 and 10 are allowable as well, at least by virtue of their

dependency from claims 1 and 3. Applicant respectfully requests that the Examiner withdraw the § 102(b) rejection of claims 1-7, 9 and 10.

2. Claim 8 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Mussell *et al.* Applicant traverses the rejection of claim 8 at least for the reasons discussed below.

The Examiner has acknowledged that Mussell *et al.* fail to teach or suggest an average pore diameter of 0.05 μm . See page 5 of the February 14, 2002 Non-Final Office Action. The Examiner maintains that it would have been obvious to one having ordinary skill in the art to find an optimum range of the prior art. However, a “particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable range of said variable might be characterized as routine experimentation.” MPEP §2144.05(II)(B), citing *In re Antonie*, 559 F.2d 618 (CCPA 1977); *In re Boesch*, 617 F.2d 272 (CCPA 1980).

The section of Mussell *et al.* cited by the Examiner regarding pore size (col. 5, lines 17-30) has no discussion regarding the relationship between pore size, current density and desired power output. Instead, the cited passage from Mussell *et al.* discusses the composition of the intermediate layer with respect to optimizing maximum voltage, i.e., the desired carbon/polymer ratios in the small pore region. In addition, contrary to the Examiner’s assertion, Mussell *et al.* further suggest that 0.1 μm is the minimum pore size, and that larger pore sizes are more desirable. There is no teaching or suggestion that the pore size is a result-effective parameter, in

that there is no discussion in the cited passage of Mussell *et al.* that the current density and desired power output is affected by the pore size.

The initial burden of establishing that a claimed invention is *prima facie* obvious rests on the USPTO. *In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). To make its *prima facie* case of obviousness, the USPTO must satisfy three requirements:

- a) The prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated to artisan to modify a reference or to combine references. *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988).
- b) The proposed modification of the prior art must have had a reasonable expectation of success, and that determined from the vantage point of the artisan at the time the invention was made. *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F.2d 1200, 1209 (Fed. Cir. 1991).
- c) The prior art reference or combination of references must teach or suggest all the limitations of the claims. *In re Vaeck*, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991); *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, the nature of a problem to be solved. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Alternatively, the motivation may be implicit from the prior art as a whole, rather than expressly stated. *Id.* Regardless if the USPTO relies on an express or an implicit showing of motivation, the USPTO is obligated to provide particular

findings related to its conclusion, and those findings must be clear and particular. *Id.* A broad conclusionary statement, standing alone without support, is not “evidence.” *Id.*; *see also, In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001).

In addition, a rejection cannot be predicated on the mere identification of individual components of claimed limitations. *In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000). Rather, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. *Id.*

Mussell *et al.* do not teach or suggest a porous polymer does not substantially contain anything except its polymer material, as recited in claims 1 and 3, and included in claim 8 via dependency. At best, Mussell *et al.* disclose a solidified polymeric composition that contains materials other than a polymer material. Applicant believes that the Examiner cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.


Based on the foregoing reasons, Applicant believes that Mussell *et al.* fail to disclose all of the claimed elements as arranged in claim 8. Applicant believes that claim 8 is allowable, and respectfully requests that the Examiner withdraw the § 103(a) rejection of claim 8.

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In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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